

REMARKS

The foregoing amendment amends claims 1, 9, 12, 16 and 17. Pending in the application are claims 1-12 and 14-19, of which claims 1, 9 and 12 are independent. The following comments address all stated grounds for rejection and place the presently pending claims, as identified above, in condition for allowance.

Claims 1 and 9 are amended clarify that a high pressure gas is a compressed gas having a pressure of at least about 1 MPa at a temperature of about 35° Celsius, as set forth in the “High-Pressure Gas Security Law” submitted with the Amendment filed April 29, 2004.

Claim 1 is also amended to change “the hydrogen” in line 8 to ---hydrogen---.

Claim 12 is amended to specify that the cooling water passes along the outside of a tank containing the hydrogen-occlusion alloy that generates the heat that is transferred to the cooling water. Support for the amendment can be found throughout the application as filed, at least, for example, on page 18, line 25-page 19, line 3 of the replacement specification.

Claim 16 is amended to change the phrase “depending upon the anode pressure of the fuel cell” to ---depending up on a target pressure of the anode of the fuel cell---. Support for the amendment can be found throughout the application as filed, at least, for example, on page 30, lines 10-24.

Claim 17 is amended to change the phrase “the amount of hydrogen consumed by the fuel cell” to ---a target power generation for the fuel cell---. Support for the amendment can be found throughout the application as filed, at least, for example on page 22, lines 8-12, and page 29, lines 6-10, which clarify that the target power generation is proportional to the amount of hydrogen that will be consumed by the fuel cell. *No new matter is added.*

Amendment and/or cancellation of the claims is not to be construed as an acquiescence to any of the objections/rejections set forth in the instant Office Action, and were done solely to expedite prosecution of the application. Applicants reserve the right to pursue the claims as originally filed, or similar claims, in this or one or more subsequent patent applications.

35 U.S.C. 112 Rejections

Applicants thank the Examiner for the close review of the claims and for the withdrawal of the previous rejections based on the JP 2001-213605 reference and the Kelly reference (U.S.

Patent Number 6,586,124). Regarding the rejection of claims 1-11, 16 and 17 under 35 U.S.C. 112 as being indefinite, Applicants amend claims 1, 9, 16 and 17 to address the concerns of the Examiner and request that the rejection of the claims under 35 U.S.C. 112 be reconsidered and withdrawn.

Specifically, claims 1 and 9 are amended to clarify that a high-definition gas has a pressure of at least 1MPa when measured at a temperature of 35° Celsius, as set forth in the *High Pressure Gas Security Law* of 1954, Japan, and subsequent revisions. The recitation of the temperature is intended to clarify the relationship between pressure and temperature in a high-pressure tank, and is not intended to limit the temperature of the gas to be 35° Celsius. Rather, the recitation merely clarifies that that a high pressure tank will have a pressure of at least about 1MPa when measured at a temperature of 35 ° Celsius, i.e., when (and if) the temperature is 35 ° Celsius, the gas will have a pressure of at least about 1MPa. The recitation is also not intended to limit the volume of the high-pressure tank in any way.

Claim 1 is also amended to change “the hydrogen” in line 8 to ---hydrogen--- to correct for the lack on antecedent basis for the phrase “the hydrogen discharged...”.

Regarding the rejection of claim 16 for being indefinite, Applicants have amended the claim to specify that the hydrogen is supplied to the fuel cell depending upon a *target* pressure of at an anode of the fuel cell, as described on page 10, lines 10-24. Applicants submit that this limitation is clear and definite and request that the rejection be reconsidered and withdrawn.

Regarding the rejection of claims 17, Applicants have amended the claim to clarify that hydrogen is supplied to the fuel cell depending upon a target power generation for the fuel cell, which relates to a projected amount of hydrogen that *will be* consumed by the fuel cell, as described on page 22, lines 8-12 of the application. Applicants submit that this limitation is clear and definite and request that the rejection be reconsidered and withdrawn.

Examiner does not apply any art against claims 1-11, and only rejects these claims under 35 U.S.C. 112, because the claims from which they depend are rejected under 35 U.S.C. 112. Therefore, it appears that these claims are now in condition for immediate allowance.

35 U.S.C. 103 Rejections

The Examiner rejects claims 12, 14, 15, 18 and 19 under 35 U.S.C. 103(a) as being unpatentable over the JP 60-68 A reference in view of the Kralick reference (U.S. Patent

Number 6,350,535). Applicants request reconsideration of the rejection in view of the amendment to claim 12. Neither the JP 60-68 A reference nor the Kralick reference teaches or suggests a cooling water that passes along the outside of a tank containing a hydrogen-occlusion alloy for generating heat that is transferred to the cooling water, as recited in claim 12.

As recognized by the Examiner, the JP 60-68 A reference does not describe using a cooling water to transfer heat from a hydrogen-occlusion alloy to a fuel cell. However, according to the Examiner, because the Kralick reference describes a fuel cell system that utilizes de-ionized water as a coolant for cooling a fuel cell, the claim is obvious. Applicants respectfully disagree, and submit that the Kralick reference describes use of a water to *remove* heat from a fuel cell. Kralick describes transferring heat generated *during operation* from the fuel cell to the water, but does not teach or suggest transferring heat *from water to* the fuel cell. The water of Kralick does not warm-up the fuel cell, as recited in claim 12.

Furthermore, neither reference teaches or suggests transferring heat to cooling water passing outside of a tank. The JP 60-68 A reference describes a heat exchanger 18, which is contained in a tank 10, that is coupled with a heat exchanger 16 that heats and cools a fuel cell 15. As recognized by the Examiner, the heat exchanger is contained *within* the tank for transferring heat from the tank 10. Therefore, the JP 60-68 A reference does not teach or suggest transferring heat to cooling water passing “outside of the tank”, as recited in claim 12.

The Kralick reference does not compensate for the deficiencies of the JP 60-68 A reference, because the Kralick reference lacks a teaching or suggestion of a tank containing a hydrogen-occlusion alloy per se.

For at least the foregoing reasons, claims 12-19 are also patentable over the cited references. Applicants also submit that the pending claims are also clear and definite.

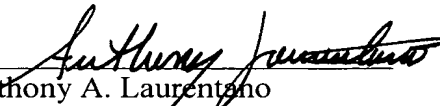
CONCLUSION

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. If the above response is not deemed to place this case in condition for allowance, the Examiner is urged to call the Applicants' representative at the telephone number listed below.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. IIW-016 from which the undersigned is authorized to draw.

Dated: November 24, 2004

Respectfully submitted,

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